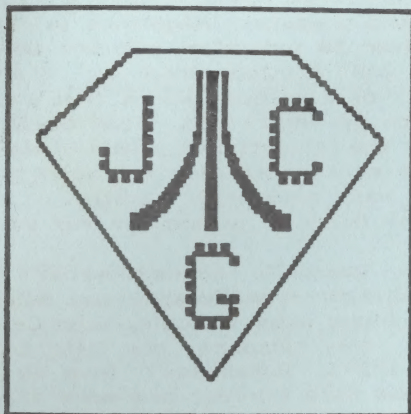




JACG 74CC

NEWSLETTER
Vol. 4 No. 5

Jan. 1985

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THE JERSEY ATARI COMPUTER GROUP

884-1642 JACG HOTLINE 884-1642

From the Editor's
Desk...

There is a great temptation to begin this editorial with the stereotypical concept of the new year's resolution. I would appeal to your senses of loyalty and guilt to firmly resolve to contribute to the newsletter this year. Remember twelve months ago, when you did just that? And, somehow, the year slipped by without a single word appearing on paper.

Well, I am not going to use that ploy. My message, if there is one, is to think back over the past twelve months of all the good times you have enjoyed with the JACG. Then decide if you did all you could as part of the group. You have seen a wealth of programs demonstrated; arcade, educational, business, utility, word processors, and more. You were privy to the latest information concerning the fate of your favorite machine, coming from people who have the best of direct contacts. You were co-hosts to some of the top programmers in the world for our machine; Bunten and White and Crawford. You got to touch the latest hardware and see it do its stuff. You have access to one of the largest disk libraries in the country and one of the most sophisticated bulletin boards around. And then there's the newsletter and, most important, the friends and colleagues you have met who share much of the passion you do for this machine.

Now! That's a lot of good stuff. Can we equal that in 1985 let alone top it? Of course we can. It all depends on you. You must get involved. You must participate. You must come forward and volunteer to demo a program, or submit an article, or share your thoughts and knowledge with us. When YOU do that we will have a retrospective twelve months from now which will leave us filled with the warmth and satisfaction of a job well done. In case you have never heard this slogan I'll say it once again - GIVE A BIT!

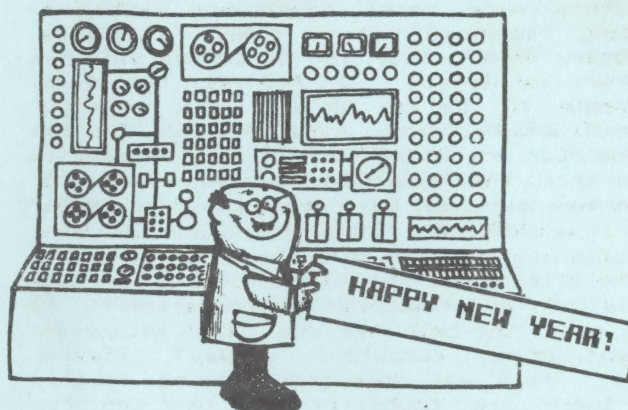
Here's wishing you a happy and healthy 1985.

Frank Pazel

Frank Pazel
Editor-in-Chief, JACG Newsletter

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MARK YOUR CALENDARS!!

JACG Meeting Schedule

January 12, 1985
February 9, 1985
March 9, 1985
April 13, 1985

From the Conn.....

It is truly amazing. Time really flies when you are President of JACG. Always a million and one things to do and only 24 hours in each day to do them. Of course, in my case, part of that 24 hours goes to Bell Labs and another part goes to my wonderful wife, Jean. That leaves little time for the details. Let me take a moment now for some of those details.

I have referred to the new Atari as JTari both verbally and in print. It is not a mistake or a misprint. JTari stands for Jack Tramiel Atari. So now you know that when you hear or read JTari and Atari, one refers to the "new" company and one refers to the "old" company. I guess you could even say, one is BT and one is AT (Before Tramiel and After Tramiel). Nah, it's confusing enough already.

By the time you read this, the world will have seen the new 8- and 16-bit JTari computers. It makes no sense to speculate now on what they will be like. One thing is almost certain though -- the 16-bit machine(s) will probably not be compatible with current software that runs on the 400/800/XL computers.

Is this bad? Is Atari doing it's users a dis-service? There are a several issues going on here. First, amid the "compatibility crisis" of about a year ago, Atari was blamed for the fact that certain software did not run on the XL computers. True, the XL operating system was slightly different from the older 400/800 OS causing some software to not run. But it was not Atari's fault.

Atari had long before published software guidelines that told third party software vendors what to do and what not to do. Any software that that was written that conformed to Atari's guidelines ran okay on the XL machines. Software that didn't conform to the guidelines simply did not run.

Now, if you want to argue that the changes that Atari made to the OS were not worth the effort (memory test, Atari logo, etc.) then I would have to agree. For the most part, the changes were a joke. But if you want to blame Atari for third party software not working on the XL computers, you are out of line.

In terms of compatibility, Atari's new XL computers were more compatible with the existing machines than other companies computers were. Yes, the Commodore VIC and C-64 are two totally INCOMPATIBLE computers. The Apple II, IIe are INCOMPATIBLE with the Apple III and McIntosh. And of course, the IBM PC and PCjr are INCOMPATIBLE. If you want to argue that the Atari XL computers were not really new machines, but rather re-worked 800s than I would agree. But Atari gave us more compatibility than any other computer company.

The last issue I want to raise is, "Why should the 16-bit machine be compatible?". I mean, what the hell are you doing with your present Atari computer, anyway? Playing games? There are more games around to play than there are hours in the next century. Word processing? Come on, there are over a dozen word processors available for the Atari right now. At least five of them will satisfy

all of your WP needs at home. I have written for four different computer magazines in the last 2 years. Over 50 individual articles were created, edited and printed from my Atari. That's a quarter of a million words that have been processed on my Atari 800. That doesn't even include the articles that were written/edited on my computer for the year and a half that I was newsletter editor. Try telling ME that my Atari is inadequate for word processing.

What else do you do? Spreadsheets? If you do not own SynCalc from Synapse you ought to be shot. It blows away Visicalc, SuperCalc, WhateverCalc and only requires one fifth the memory of Lotus 1-2-3. Databases? Give me a break! SynFile and Data Perfect are more than your home needs will EVER require.

The point is that the present Atari computer and the software that is available for it are sufficient for home use and even a small business operating out of your home. With the sale of thousands more Atari computers over this holiday season gurantees even more software. But what more could you want? If you have major business computing needs, you shouldn't be using an Atari in the first place.

So there is really no reason why the new Atari computers should be compatible with existing software or for that matter, why you would ever want or need another computer! Right?

Next month I will discuss why you would or wouldn't want another Atari computer.

Arthur Leyenberger
JACG President

J A C G Hotline

(201) 884-1642

The JACG Hotline is a service offered by the Jersey Atari Computer Group to it's members and everyone else. The purpose of the Hotline is to disseminate information about the world of Atari computing in an easy to use method and be available to all. The Hotline is available 24 hours per day and can be reached by calling (201) 884-1642. You don't need a modem to call!

When you call the Hotline you will hear a recorded announcement containing information about JACG and Atari computing. The message number and date are mentioned first, followed by Atari news. After the Atari news, information about joining JACG will be given. Messages for any of the JACG officers may be left at the end of the announcement.

A second purpose of the Hotline is to provide information about JACG activities in a timely manner to as many people as possible. For example, if it is snowing or there is a Bell System strike, calling the Hotline will tell you if there is going to be a meeting.

Suggestions for improving the JACG Hotline are always welcome.

(201) 884-1642

J A C G Hotline

Getting Down to BASICS

by Richard Kushner-JACG

This month we will get around to looking at some variations on the "SINESCAPE" program that I presented a couple of months ago. But first, I must mention an offer from LJK that arrived in today's mail. LJK is the maker of Letter Perfect, Version 6, which is my favorite word processor and Data Perfect, my favorite data base for the Atari. They also make Spell Perfect, a spelling correction program that works with Letter Perfect. All three programs retail for \$99.95. Now, \$300 is a lot of bread to lay out, even for three programs as good as these. But, until January 31, 1985, you can get all three for \$99.95. This is really an exceptional deal. I should warn you that there are rumors that LJK is going out of business. However, I don't believe that this really matters, since all three programs have been well debugged, all work well and all come with better than average documentation. If they do go out of business, there will be no more updates, of course. If you're interested, send \$99.95 (+\$5 shipping/handling) to LJK Enterprises, Inc., 7852 Big Bend Blvd, St. Louis, MO 63119. They also will accept a Visa or Mastercard order. I rarely promote the sale by a commercial enterprise of any product, but this is really too good a deal to pass up.

Back to SINESCAPE, now. See the October JACG newsletter for the original program and my challenge to you all to rewrite the program for other graphic modes. I am still disappointed by your response, having only gotten a reply from one member, from Costa Rica. Nonetheless, undaunted but angry, I go on. Roy Lent sent in the variation listed at the end of this article. He modified the original program to work in Graphics 11, so that owners of Atari 400/800 computers can see the effects. But he went even further. He made changes (line 154) to draw a second, differently colored sine curve and also added sound (line 155). Personally, I like his first change, but dislike the sound. You are free to make your own judgments. What Roy did is a perfect example of the versatility of BASIC. First, programs written in BASIC are generally easy to understand. Second, they are easy to modify and experiment with. If you don't like the change you made, try another. My best advice is to save your changed program before you attempt to run it, because in some cases your changes may cause the computer to "lock up" when you run the program, meaning that only by turning the computer off and back on again can you regain control, losing any program in the computer's memory in the process.

Now a confession. In the face of no feedback from any of you, I am running out of enthusiasm and ideas for this column. There are lots of topics that could be discussed in a column on Atari BASIC, but I'm tired of shooting in the dark. If you can't submit a program for

this column, how about submitting some ideas or problems to consider? In the absence of any response from you, I may just give this up. I'm giving one month for some sort of responses, since next month's column will be taken up by a detailed report after I attend the Consumer Electronics Show in early January. Put on your thinking caps and help me out. That is, if you care.

```
10 REM SINESCAPE BY DANIEL COOPER
11 REM FROM BYTE MAG. SEPT '84
12 REM MODIFIED FOR ATARI GR.11
13 REM BY RICHARD KUSHNER - JACG
15 REM FURTHER MODIFIED BY ROY LENT
16 REM TO ADD SOUND AND TWO CURVES
20 GRAPHICS 11:COLOR 5
30 FOR T=0 TO 191 STEP 4
32 PLOT 0,T:DRAWTO 79,T
36 NEXT T
40 A=INT(RND(0)*300):REM PHASE SHIFT
50 N=INT(RND(0)*20)+10:REM FREQ.
60 Z=INT(RND(0)*150)+50:REM AXIS LOC.
70 ZF=Z:IF Z>180 THEN ZF=180-(Z-180)
71 REM : HEIGHT FACTOR
80 W=INT(RND(0)*ZF):REM CURVE HT.
90 IF W<10 THEN W=10
100 G=INT(RND(0)*2)+1:REM STEPSIZE
110 C=INT(RND(0)*8):REM COLOR
112 COLOR C
120 REM PLOTTING ROUTINE
130 FOR X=0 TO 78 STEP 6
140 Y=SIN((X+A)/N)*W+Z
142 IF Y<=1 THEN Y=3
144 IF Y>190 THEN Y=190
146 COLOR C+2
150 PLOT X,Z:DRAWTO X,Y/2:COLOR C
152 PLOT X,Z:DRAWTO X,Y/2
154 COLOR C+4:PLOT X,Z+1:DRAWTO X,Y+1:
DRAWTO X+1,Y-1
155 SOUND 0,250-X,10,4:SOUND 1,Y+50,10
,4:SOUND 2,Y+(Z/8),10,4
160 NEXT X
170 GOTO 40
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GIVE A BIT!!!

DECEMBER MEETING HIGHLIGHTS

Reported by
Joseph S. Kennedy

The meeting was again preceded by a lively question and answer period during which topics as diverse as R-drivers, Okimate printers and Christmas trees were discussed. This is one of the prime benefits of membership in the JACG- the chance to get answers to all your Atari questions from the people who know - Atari users. (The answer to the Christmas tree question was Library Disk #39. Look it up!) President Art opened the meeting with some comments on up coming products-

- Electronic novels from Synapse
- New machines from Atari like a rumored 128K 880XL and a 16 bit machine to be shown in January and a 32 bit machine to shown in April in West Germany
- Our suggestions for AUGI (the Atari Users Groups International) to place emphasis on were discussed. The following points were brought out-
- Compatibility of old software with upcoming machines
- Support of third party software development
- High level programming language development
- Warranty considerations
- Toll free help number

These points will be passed on to AUGI. Andy and Phil Greenhut demoed the Atari Science Lab with the temperature module for us. Several other packages will be available for the budding Edison in all of us to experiment with including light, crime and nuclear resources. This package looks interesting for both learning science as well as experimenting.

Dave Buschke flew us over Libya in his demo of F15 Strike Eagle from Microprose. This is Microprose's most complex flight simulator yet and includes a heads-up sighting system. All-in-all it looked very exciting.

Perhaps our youngest solo demonstrator yet was Kristen Frese who gave us a tour of the inside of a computer with her demo of Debug from Electronic Arts. This game also teaches the basic make-up of a computer to the novice user.

Frank "The Word Processer" Pazel played engineer under the Christmas tree with Trains from Spinaker. This program lets you play with the trains all you want without once having to get up from the transformer to put the darn thing back on the track. As a matter of fact one might say that this program is right on track.

Frank also requested information on a program for the Atari that would generate a will. The deadline for newsletter articles is to be the twentieth of the month. Art showed us the Home Pak package. He promised that next month he would bring the disk and show us the program. Art did give us a brief demo of Jerry White's U.S. Adventure. He also pointed out that Infocom has a sampler of their electronic novels on the market for \$9.95 that has a coupon for an \$8.00 rebate included. Sounds like a good deal.

Scott Brause demoed the Atari Light Pen and some of the new features with it including the ability to add text to the drawing. The package sells for \$49.95.

Ali Chaudry requested anyone with suggestions for meetings or those who would like to present anything at a meeting to call him at home 201-647-6822 or at work 201-605-7317. The January meeting will be on telecommunications and Art will be fresh back from the Las Vegas Consumer Electronics Show with a report on all the latest for us.

GIVE A BIT!!

CAVEAT ASTRA

Frank Pazel
Editor, JACG Newsletter

I am, unfortunately, the owner of an Astra Double Density Double Disk Drive. They call it a 1620, I call it a 405. I hope the following account will save other JACG members from the problems and frustration I have encountered.

The Astra 1620 disk drive has an inherent design defect, insufficient dissipation of excessive heat generated. When my drive arrived the first time, it worked only for about an hour. Astra fixed it under warranty and said they had their heat problems licked. The second time, one drive worked for about 5 months, and the second about 7 months. It still ran very hot, to the point of warping diskette envelopes. It is well known to reliability engineers that electronic component failure rates increase exponentially with temperature.

When the drive became totally non-functional, I called Astra. Mr. Drew Fetherston (known to me at the time only as the plant manager) assured me they had made further improvements to solve their problems, and would repair my drive for \$45 plus return shipping. About three weeks after I shipped the drive to California for repair, I received a call from a technician at Astra, informing me that it would be another \$110 for parts (both drive mechanisms). I requested that Mr. Fetherston call me, as he had guaranteed that the drive would be fixed for the nominal charge, and I didn't see why I should have to pay for their design errors. I never heard from Astra; instead the drive arrived again, unrepaid. They even cashed my check. Astra has since told me "tough luck", and has failed to respond to a complaint filed with the California Attorney General's office. They must know that a suit against them would cost me more than the whole thing is worth. So I am a stuckee, now having \$550 invested in a totally non-working machine.

Needless to say, I recommend that JACG members, and everyone else, steer clear of this piece of junk, lest you become a stuckee too.

William W. Hough
1638 Stephens Drive
Wayne, Pennsylvania
19087

OOOPS!

Apologies to ANTIC magazine. The December issue of the newsletter had an article on page 16, "Atari Press Conference" which we failed to credit to the good offices of ANTIC. Sorry, ANTIC, especially since you're one of our favorite monthly surprises.

Beyond Armageddon Adventures in Adventuring

by Lord Demonfire

1985 promises to be a fun-filled year. New companies are entering the adventure market, and those adventures out there are beginning to step forward and be recognized. Many new adventures cater to kids and catch their interest in adventuring. I could write pages and pages about what can, will, and should happen in 1985, but I think right now the best approach to take is "let's wait and see."

Kicking off the new year is a new generation of adventures based on books. One of the most notable of these attempts is Infocom's The Hitchhiker's Guide to the Galaxy, based on the popular trilogy by Douglas Adams. You play Arthur Dent, a confused Englishman, who gets picked up along with his friend Ford Prefect (who turns out to be from Betelgeuse) by a Vagon Constructor Fleet as it demolishes the Earth to make way for an interstellar bypass. The object: to help Zaphod Beeblebrox, the ex-President of the Galaxy, find the legendary planet of Magrathea, where half the wealth in the galaxy was supposedly stored. If this sounds confusing, it is.

Part of the fun in Hitchhiker's Guide is the caustic wit that was preserved so well from the book. It does wear a bit thin at times, but all in all it really makes this one special. It follows the book rather closely, but it is different enough to still provide hours (days, weeks, months) of enjoyment. One of the problems, however, comes from the fact that the parser is relatively restricted as compared to other Infocom games. This means that you must enter commands exactly; PUR THE TOWEL ON THE HOOK might not work but HANG THE TOWEL ON THE HOOK might. In spite of this drawback, I highly recommend this one (also, the packaging is excellent) to those science fiction fans out there. I give it an A-.

MAIL CALL:

Following are some questions I've received on the Bulletin Board. You can send me messages on the DEMONFIRE Q&A board or mail them to Scott Brause who will relay them to me. Now, onto the mail...

Zork I & II: "In Zork I, how do I exorcise the spirits? Your last clue didn't really help. In Zork II, how do you break the princess' trance? I've tried splashing water on her, giving her all my valuables, and even killing her, yet nothing helps." (Kim Smith)

OK, here we go. On Zork I, you take the bell, book, and candles to the Entrance to Hades. Drop the candles there, and ring the bell. Hold the candles (light with match if necessary) and read the book. On Zork II, try waking her up.

Hitchhiker's Guide to the Galaxy: "How do you get the babel fish?" (Joseph M. Hynes)

First, take off the gown, tie up its sleeves, and hang it on the hook. Second, lay the towel over the drainhole in the floor. Third, put Ford's satchel in front of the robot panel. You might also want to throw something into the air.

From time to time I also get questions about when new products will be coming out. For example, I recently got a message from Mike Murphy asking when Ultima IV would be released. Mike, I'm as in the dark as you are about that one; I was told that it would be out before Christmas but obviously it wasn't. I do know that it is subtitled "Journey through the Night Hills," though.

TRIVIA:

Now to tie up some loose ends on trivia questions posed in the past as well as introduce some new ones. In Zork I, Aragain Falls is Niagara Falls spelled backwards. The towel in Planetfall is the forerunner to Hitchhiker's Guide to the Galaxy. Now for some new ones: What do the Roman numerals on the table in Zork III represent? Also, can anyone name all twenty-nine spells and five potions in Enchanter and Sorcerer? (BONUS: what does each do?) If you have the answer to one of these questions or a trivia question you would like printed here, send it to me via the Bulletin Board or Scott Brause.

That's it for now. Remember to send me your mail; I will reply immediately plus perhaps print it in the column. Until next month, good adventuring!



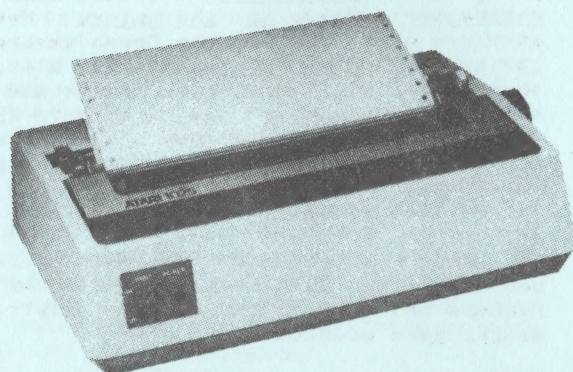
By my authority I place you above
all others of your kind!

G E M I N I ' S

ATARI COMPUTER & ACCESSORY BUYER'S GUIDE



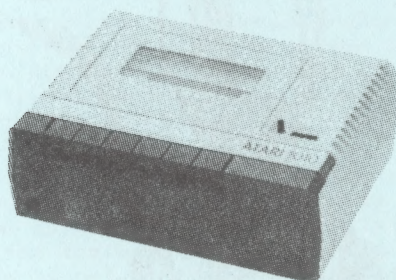
800XL . . . \$129.95
64K COMPUTER



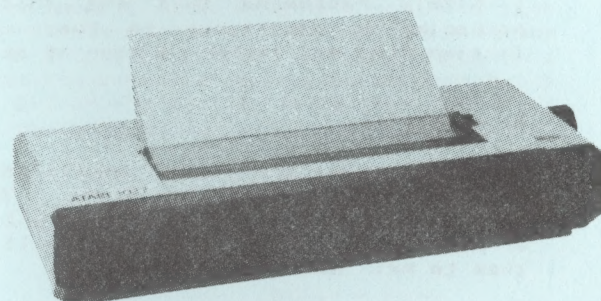
1025 . . . \$ 184.95
DOT MATRIX PRINTER



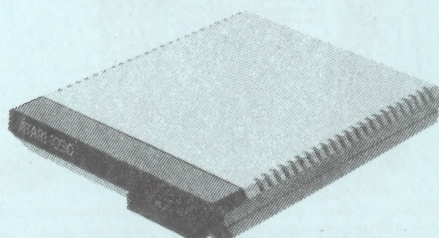
1050 . . . \$179.95
DUAL DENSITY DISK DRIVE



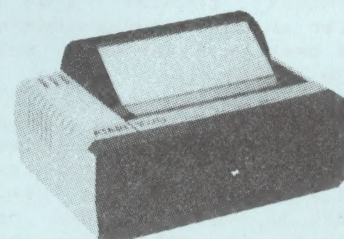
1010 . . . \$44.95
CASSETTE RECORDER



1027 . . . \$ 249.95
LETTER QUALITY PRINTER



1030 . . . \$89.95
TELEPHONE MODEM



1020 . . . \$ 79.95
COLOR PRINTER/PLOTTER

R.A.N.D.O.M. N.U.M.B.E.R.S.

by
Hank Hirschfeld-JACG
(201)767-1344

Sorry for the delay in articles but I do try to adhere to the title of my column. Ed. note: (RND,very) In this issue I would like to report on a new operating system and the potential effect on using DATA PERFECT.

SpartaDOS and US Doubler from ICD Inc.

First I will mention US DOUBLER which is an inexpensive way of converting the Atari 1050 drive to support true double density together with Atari dual density and standard DOS 2.0. This mod gives a format of 707 sectors with 256 bytes per sector, the Atari dual density is 1040 sectors with 128 bytes per sector. The modification requires that you open up the drive and remove the drive motor assembly and shield and work on the main printed circuit board. The mod replaces U8 and U10 chips with two new chips and a wire from the new U8 chip must be inserted in either a pin on U9 or soldered to a certain point on the board (I think the soldering is a better practice to improve reliability). The instructions are very good on how to open the unit up and insert the new parts. The price of the modification kit together with SpartaDOS retails for approx. \$69 so considering the low prices on the 1050 now you can buy a 1050 & upgrade for less than \$225. A good price compared to the third party drives that support multi formats.

Now for SpartaDOS the software package that comes with the kit. This DOS is a fairly sophisticated DOS in that it compares with CP/M and MS-dos in function. This is a resident DOS in that DOS is always in memory and can be called without going to disk for certain modes. The price you pay is that fre(0) goes down to 30734 with BASIC. What we gain is a number of internal commands which we can get without going to disk, these are:

APPEND
Batch commands
BUFS-Buffer blocks avail
CAR-Cartridge
COPY-if page 6 is used this is external.
CREDIR-Create subdirectory
CWD-Change working directory
DELDIR-Delete subdirectory
DIR-Display directory(will acc. disk for dir.)
ERASE
LOAD
PRINT
RENAME
RUN
SAVE
TYPE-Display ASCII file contents

The external commands are:

RS232
CLS-Clear screen batch cmd.
DIS_BAT-Disable batch cmd.
DUPDSK

FORMAT

INIT-Initiate to format plus more
MEMLO-Display memlo
PAUSE-Batch cmd.
PORT-Port configuration
SET-set in date
SPCOPY-Copy DOS2 to spataDOS and back.
TIME-Set time
TREE-Show directory paths.
UNERASE-To restore file that was erased.

Some things of interest are that we can set the date and time and the screen will display this info and display it in the directory when files are added. The batch process allows us to connect any programs on the disk together with text we may enter and want to use for information. Notice we cannot lock a file, this is the function of unerase in that if we do delete a file we can restore it providing we have not written into those file sectors. Another feature is the use of certain extensions, the .CMD is for boot and run, .BAT for batch programs.

One of four DOS modules can be used during INIT. These are RO(Read only), RO_HS(Read only high speed), STD(Read and write) and STD_HS(You got it). You can also format with no DOS. The HS is supported by the US DOUBLER above and is a high speed data transfer. The RO modules are useful for game disks since they reduce the overhead on the disk, in order to write to those disks you would have to boot up a disk with STD or STD_HS on it. Files in the directory are displayed in total bytes instead of sectors. The time and date information can be accessed from within a program.

The following is what appears to be on the disk after a format. Keep in mind the number of bytes per sector is 128 for single and 256 per sector for double:

	SINGLE	DOUBLE
NODOS	713	713
RO	681	697
RO_HS	678	695
STD	668	690
STD_HS	665	689

Note we do not have a DUP.SYS and since we have internal commands we use no MEM.SAVE.

Next month I will go over some other things I have found out using this package plus how the DOUBLER works with DATA PERFECT and a third party program for converting single density DATA PERFECT files to double density. Now you can possibly put twice as much data on one disk reducing your chances of having to split your database. Look for PERFECTING DATA PERFECT next month(maybe).

NEXT MONTH!!
YOUR ARTICLE

Could Be In This Space
And Beyond.....

Simple Screen Dump

by Tom Reichard - JACG

Several micros have a built in screen dump which allow a screenful of data to be dumped to the printer with a single keypress. The following is a simple BASIC program which essentially accomplishes the same thing.

As a stand alone program one simply RUNS it, then types to the screen using all of Atari's great screen editing features. When you want a screen dump to your printer simply press START. To continue on to another screen just press SHIFT and CLEAR (or CONTROL and Clear) then resume.

You need to be careful in using control characters as some of them affect printer actions. However, if you learn their functions for your printer, adding them to your text can give you some additional interesting features. For example a control N at the beginning of any line will cause that line (but not the next one) to be written in expanded type for many printers.

Enjoy!!

The program

```
10 REM SIMPLE SCREEN DUMP T.REICHARD
20 DIM SCR$(40*25),H$(40)
30 CLOSE #2:OPEN #2,4,0,"K:"
40 CLOSE #4:OPEN #4,13,0,"E:"
50 POKE 82,0:POSITION 0,0:?"!!";: REM SEE
SPECIAL NOTE
60 POKE 764,255
70 IF PEEK(53279)=6 THEN 130:REM CHECK FOR
START KEY
80 IF PEEK(764)=255 THEN 70
90 GET #2,KEY
100 ? CHR$(KEY);
110 IF PEEK(84)=23 THEN 190
120 GOTO 60
130 POKE 752,1:POSITION 0,0:?"!!";: REM SEE
SPECIAL NOTE
140 FOR ROW=0 TO 22
150 H$=""
160 POSITION 0,ROW:INPUT #4;H$
170 LPRINT H$
180 NEXT ROW
190 POKE 752,0:POSITION 0,0:?"!!";: REM SEE
SPECIAL NOTE
200 GOTO 60
```

SPECIAL NOTE : IN LINES 50, 130 AND 190 THE !! ARE SUPPOSED TO BE ESC CTRL DOWN FOLLOWED BY ESC CTRL UP ARROW WHICH CANNOT BE PRINTED USING THIS WORD PROCESSOR. PLEASE CHANGE THEM IN YOUR PROGRAM!

PROGRAM NOTES

LINE 40: - THIS ROUTINE IS NOT WELL KNOWN. IT ALLOWS LINE BY LINE INPUT FROM THE SCREEN. (SEE ALSO THE LOOP FROM 130 TO 180)

LINE 110 - DISALLOWS ENTRY OF DATA TO LINE 23 OF SCREEN. AVOIDS PROBLEMS ASSOCIATED WITH SCROLLING. PRINTOUTS THUS ARE LIMITED TO 23 LINES (0-22)

WITH SOME ADDITIONAL PROGRAMMING ONE MIGHT - WITH RELATIVE EASE - ADD A SCREEN SAVE ROUTINE GIVING YOU A SIMPLE WORD PROCESSOR WHICH YOU COULD COUPLE WITH VARIOUS BASIC PROGRAMS AS A SUBROUTINE.



SNOWSTORM

Logo Art by
Frank Pazel/JACG

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DISK FORMATTING

by

Kenneth J. Pietrucha - JACG

To me, the most sensible approach to formatting has always been to format a new box of disks all at one time. I made this decision after I tried to save a program to an unformatted disk. Now I don't even take the cellophane off the box until I'm ready to format them all.

Formatting an entire box of disks, using DOS, involves a lot of key strokes. Fortunately, the Atari has an XIO command which allows you to format directly from BASIC. Actually, the whole formatting program can be written as a one or two liner.

```
5 REM FORMATTING PROGRAM
10 XIO 256,#1,0,0,"D:"
```

That's it !! Type RUN, hit RETURN and your disk will be formatted. This may be one of the shortest formatting programs ever, but you don't have to keep it that way. Now is your chance to write your own customized formatting program. You can have the screen change color during the formatting process, or you can add a counting step, like N=N+1, to tell you how many disks have been formatted. You can use the special function keys to start the format process instead of typing RUN each time.

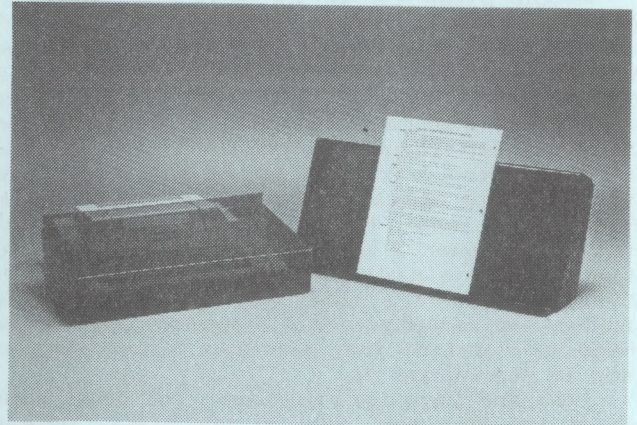
There is very little additional information on the XIO command. In Lon Poole's book, Your Atari Computer, only a brief mention is made of this XIO function. I don't know the specifics, only that it works. As a matter of fact, every BASIC formatting program I have ever seen uses this command.

Here is my version of a formatting program which I keep on my utility disk. It keeps track of the number of disks formatted. If I start with a new box of ten disks, I'd better have the number 10 on the screen when I'm finished.

I think you'll like formatting with this approach, it is definitely easier than using DOS.

```
10 REM DISK FORMAT PROGRAM
11 REM      BY
12 REM KENNETH J. PIETRUCHA
13 REM NOVEMBER 29, 1984
20 TOTAL=0:PRINT CHR$(125):POKE 752,1
25 POKE 709,14:POKE 710,20:POKE 712,20
30 TOTAL=1+TOTAL
35 POSITION 6,7:PRINT "INSERT DISK TO BE
  FORMATTED"
40 POSITION 5,9:PRINT "PRESS START TO
  FORMAT DISK #";TOTAL
45 IF PEEK(53279)<>6 THEN 45
48 POKE 710,32
50 FOR X=1 TO 200:NEXT X
52 XIO 254,#1,0,0,"D:"
60 POKE 710,20
65 POSITION 6,14:PRINT "FORMAT OF DISK
  #";TOTAL;"COMPLETE"
70 POSITION 7,16:PRINT "PRESS OPTION TO
  CONTINUE"
75 IF PEEK(53279)<>3 THEN 75
80 PRINT CHR$(125):GOTO 25
```

Introducing The New Standguard— A Computer Keyboard Cover And Bookstand In One

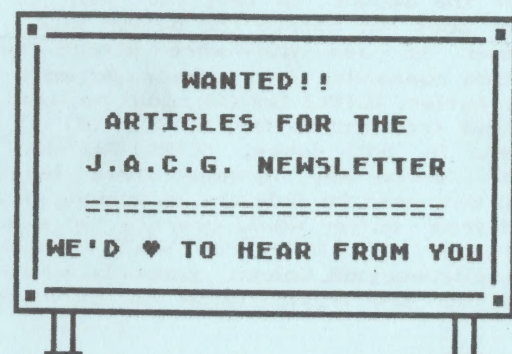


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Features of Atariwriter II

by Arthur Leyenberger - JACG

People often ask me for advice on what word processor they should buy. I usually recommend Atariwriter, The Writer's Tool and LJK's Letter Perfect. The choice depends upon how much writing they are likely to do. Then when they press me on what I would buy for myself, I tell them this: The Writer's Tool is an excellent word processor but it currently costs twice what it should. I have been using Letter Perfect for over two years, and although LJK finally produced a barely comprehensible manual, the program is still buggy. Atariwriter is the best value for the money right now, although it lacks some features that I would like to see. Here is a list of the features I would like to see in Atariwriter II.

Time and Date stamp files: The user would enter the time and date at the start of each session and Atariwriter would keep track of the time after that. Any time a file was saved, the corresponding time and date would also be saved. A directory listing would show the file name, time and date of last save, and whether the file was locked or not.

The capability to save output to disk, in addition to the screen (preview) and printer.

Split screen capability: The user would be able to edit two files simultaneously. Also, text could be inserted from one file to the other and vice versa.

Modifiable Printer Drivers: Provide printer drivers for all printers imaginable and allow the drivers to be interactively modified and saved. When modifying a driver, the user would see what the current values are and could decide to change them or not. These drivers would also contain the same information as appears on the top line of the Edit Screen. Therefore the Edit screen would only be used to alter an existing setting.

Better Manual: A manual should contain at least: a table of contents, tutorial, reference section, glossary and index. The present Atariwriter manual is difficult to thumb through with the section dividers extending to the edge of the book.

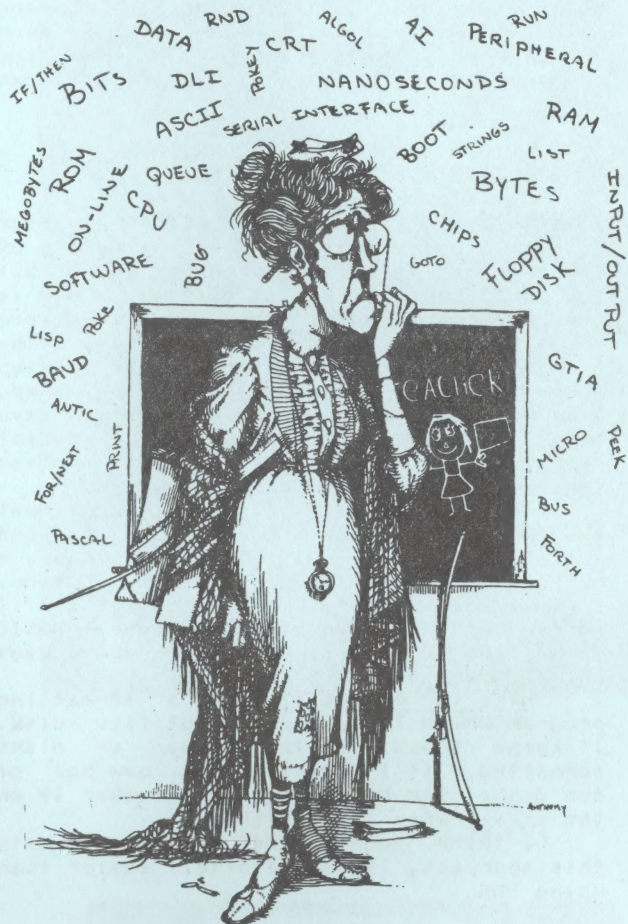
Automatic completion of block move operation. Currently, when the block you wish to move exceeds the buffer capacity, only as much text as fits in the buffer is moved. You must go back, re-mark the remainder of the block you want to move, and perform the block move operation again. The program should take care of the entire operation, regardless of whether the amount of text you want to move does or does not exceed the buffer size.

Easier to use and more direct buffer operation commands. For example, to move text to the buffer, [CTRL] [m] [>] could be used. To move text from the buffer, [CTRL] [m] [<] could be used. In both cases, [CTRL] [m] was used and the "arrow" key (greater than, less than symbol) was used to indicate direction. A copy to and from buffer would operate in a similar way, except [CTRL] [c] "arrow" would be used.

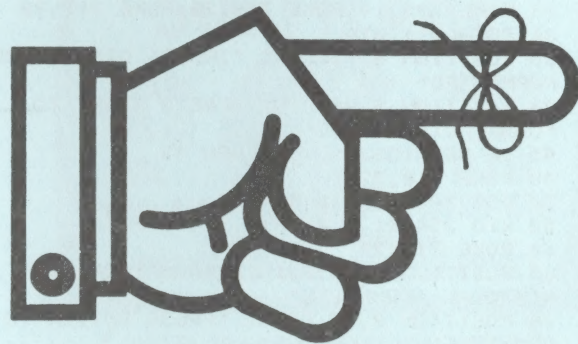
Miscellaneous: 80 Column support; Access to any of four disk drives; Allow use of track ball

for cursor positioning; insert/overwrite mode toggle; Make cursor keys unshifted so that they only require a one-key, non-shifted movement to use; Limited on-line help facility; Global replace command in addition to "interactive global replace"; Speeded-up cursor (especially with 80-column use); and User definable macro commands.

That's what I would like to see. How about you? JTari is working on Atariwriter II right now. It may be out in the first half of 1985.



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NAME: T. SAWYER				DATE: 12/14/84			
MULTIPLICATION TEST #1.....				SCORE=88%			
WRONG				RIGHT			
11X11=121	7X11=77	8X8=64	9X9=81	7X12=84	8X10=80	9X11=99	10X10=100
11X12=132	12X11=132	11X13=143	12X12=144	11X14=154	12X13=156	11X15=165	12X14=168
11X17=187	12X16=192	11X18=198	12X17=204	11X19=209	12X18=216	11X20=220	12X19=228
11X22=242	12X21=252	11X23=253	12X22=264	11X24=264	12X23=276	11X25=275	12X24=288
11X27=297	12X26=312	11X28=308	12X27=324	11X29=319	12X28=336	11X30=330	12X29=348
11X32=352	12X31=372	11X33=363	12X32=384	11X34=374	12X33=396	11X35=385	12X34=408
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11X477=4827	12X476=5672	11X478=2528	12X477=4924	11X479=1849	12X478=4074	11X480=1850	12X479=3316
11X482=4872	12X481=5732	11X483=2543	12				

MICROBITS MPP-1000C MODEM DRIVER PROGRAMS

by

Kenneth J. Pietrucha - JACG

The Microbits MPP-1000C is one of the more popular modems for the Atari. During the course of the year it has been reviewed favorably by Dick Kushner in the March Newsletter and again in L. Moriano's Telecom column in the July issue.

The terminal program for this modem is on a cartridge, and although it is superb, I soon found myself wishing I could modify it to my taste or perhaps write a simple program to modify it.

It was about this time I discovered the Microbits Modem Driver Programs. This software package consists of a manual (approx. 45 pages) and a disk using both sides.

Side one contains the driver programs as well as some public domain programs, such as AMODEM 4.2, AMODEM 4.4, JTERM and a program called DISKXFER which allows transfer of an entire disk at one time using sector copying. What you are actually buying is the driver program. When this program is booted up, it opens the channel for the modem and fools it into thinking that it has opened the R: device in the 850 interface. This handler also includes emulation of some of the standard SMARTMODEM commands such as auto-dialing and auto-answering. This will allow you to run terminal and BBS software written for the Hayes or other compatible modems.

I have taken some of the modem programs in the J.A.C.G. Library and run them on the Microbits Modem without any problems.

The second side of this disk is a real treat. It contains a working AMIS Bulletin Board System that has provided quite a learning experience. The instructions contain a step by step procedure for getting on line. The system even has an accurate 24 hour clock. Other sections of the manual include instructions for compressing callers' files, editing files, operating tips and a slew of other hints. This package is available from Microbits, or your friendly computer store and sells for \$19.95.

I can not tell you how much I have enjoyed trying out every terminal program I could beg, borrow or steal. The bulletin board program has also provided me with endless hours of pure technical enjoyments. This is a software package I would recommend to anyone who has a MPP-1000C.

If you already have a good working modem and are just interested in playing with a bulletin board, take a look at J.A.C.G. disk #36, which has a mini AMIS BBS complete with documentation.

If all goes as I planned and when my BBS screens are finished, I would like to pick a Saturday evening and put my SATURDAY Nite Special on line for one night, just to see what it feels like. Hopefully, I'll let you know in a few months when to dial me up.

The B.A.S.I.C. Bulletin

Reviewed by Joseph S. Kennedy - JACG

It's not often that a user's group newsletter gets reviewed. However, this is not the usual newsletter. The B.A.S.I.C. Bulletin comes on a double-sided disk from The Brooklyn Atari Society for Information and Communication. The difference between a normal newsletter and this one is, of course, that you don't have to type in any of the tutorials or programs to try them out. (Provision is made for those with printers to obtain a hard copy of any article if desired.) The issues reviewed - Volume II Numbers 2 and 3 - included the usual items found in newsletters - editorials, reviews and tutorials. They also included items that would not normally be found in a newsletter such as Version 1.92 of Amodem+, the public domain telecommunications program, and Double Decker, a machine language pinball game made with Pinball Construction Set, both ready to boot up and run.

Both issues included good graphics "covers" which unfortunately do not appear when the disk is booted up. The editors chose, instead, to have the Table of Contents auto boot. Presenting the cover before the Table of contents would have been a nice touch. Also the choice of a "computer font" for the print style makes reading the material on a TV screen somewhat difficult at times. (It may be better with a monitor. I don't know.) These drawbacks aside, The B.A.S.I.C. Bulletin is an interesting format for a user's group newsletter (or should that be newdisk??). While it's not the JACG Newsletter (after all there can only be one number one), it could be of interest to many people. If it is you can subscribe for \$35.00 per year (six disks) or purchase individual disks at \$7.50 per copy from:

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COMPUTER-MANIA



One On One

By Electronic Arts

Reviewed By
Arthur Leyenberger - JACG

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According to research done on computer games, there are three aspects that affect the quality and acceptance of the game. The first is challenge. Variable difficulty levels, multiple goals, randomness and uncertain outcome contribute to making a game challenging and fun to play.

Another important aspect of a great game is fantasy. Intrinsic fantasies that depend upon a particular skill and extrinsic fantasies that don't depend upon a particular skill are both useful ways to describe a video game. The third aspect of a good game is curiosity. This may result from the colors, graphics and animation on the screen, the control/character movement, or the player's personality.

At first blush, there is not too much you can say about a video basketball game. Although knowledge of the specific rules may not be common, the game of basketball is something that just about everyone is familiar with. However, One-on-one, the new basketball simulation game from Electronic Arts, may be evaluated using the above criteria. Here's why.

The features that make One-On-One more than just another sports video game rip-off are the game qualities that Electronic Arts is already well known for: the playability and depth of the game. Two NBA basketball stars, Larry Bird of the Boston Celtics and Julius Erving ("Dr. J.") of the Philadelphia 76ers helped design the game with software author Eric Hammond. The game really captures the moves and strategies of "The Bird" and "Dr. J" and results in a game that approximates a real-life basketball experience.

To develop a game that feels like you are really on the court, Hammond studied films of Bird and Erving in action. He then used the expertise of the two famous players to produce statistical tables of their shooting percentages, guarded and unguarded, from every part of the court. They also provided him with advice on the kinds of strategy and maneuvers he should build into the game to make it satisfying and exciting.

In terms of challenge, One-On-One can be played on several different levels. When playing the computer, you can choose to be either Bird or Erving and can select from four levels of play. Shots are both easier to block and easier to make in the "Park and Rec" level. In the "Varsity" game, more finesse and timing are required and the referee will call fouls. The "College" level is very challenging and will be the game that you will want to become proficient at before going on to the "pro" level. Going one-on-one with the computer at the "Pro" level is best left for video athletes in top condition.

The second aspect of a good game is fantasy and plenty of it can be found here. Imagining yourself as either of these two top

athletes is worthy of the best fantasy. The manual accompanying the game gives lots of tips on strategy from both players. Following their advice will allow you to play like a pro.

The curiosity component of the game is satisfied by the many nice touches to the game. As in a real basketball game, continued physical exertion will result in fatigue. As a player becomes tired, his shots will be off and he will not move as quickly. To let you know when your player is becoming fatigued, a fatigue indicator is provided at the bottom of the screen. Dribbling slowly in place and calling time outs will give your player the rest that he needs to play in top form.

According to Larry Bird, "There's no doubt when you get the flow going. Hit 4 or 5 in a row and the next time down you might stop and shoot from anywhere on the court. You know you're going to get it." The opportunity to get hot is built into the game. When you feel it is happening to you, you'll know it and will attempt that impossible shot.

In addition to such features as hot and cold streaks, fouls and player fatigue, One-On-One adds additional real-life features as instant replays of exceptional shots and a backboard that shatters when a player makes a ferocious dunk. There is even a 24-second-shot clock and when a foul occurs, the referee appears on the court and blows his whistle.

I don't consider myself to be an avid basketball fan but playing One-On-One is really exciting, especially when I am down by 4 points in the fourth quarter and the clock shows 30 seconds left in the game. Spinning around to make a jump shot, seeing the "swish" and watching the instant replay is satisfying in a way that few video games can match.

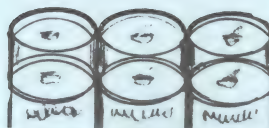
Electronic Arts has produced another winner with One-On-One. Playing the game and reading "Dr. J" and Bird's comments from the design sessions has given me a new appreciation for Basketball. There is really a lot more to both the real game and the video game than I had originally thought.



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WHY FORTH?

by Donald Forbes - JACG

This is my answer to the question: WHY FORTH?

I am writing this for the newsletter, Frank, because you told me to. I knew you were a pilot. I did not realize that you were once a Bell Labs engineer, until I saw you written up in the Morris County Daily Record with your picture on page one and another picture on the front of the inside section as a prominent local public educator. I knew you chose to be a public educator because that is what you enjoyed doing. I thought, like everyone else, that public education was an underpaid profession; I never thought I would have to add my wife's salary to match yours.

As an engineer you will understand the reasons I have been advocating FORTH all along. If you would rather have a explanation written up for the newsletter, instead of a verbal one, I will be glad to oblige. As an engineer trained in mathematics I won't have to spell out for you all the details, or identify all the participants in the drama.

Above all, we must understand that mathematics is the language of science and the apotheosis of our culture. When we capture the first little green spaceman with the pointed head in his UFO, we will marvel at their command of metallurgy and electronics, but the real questions will be: What do you know about mathematics? When did you discover the calculus? Do you know set theory, and if so how did you discover it? (Cantor discovered it all by himself, and died in the insane asylum at Halle in 1918.) What do you know of category theory, of the mathematical foundations of quantum mechanics? Do you have an equivalent of Einstein's unified field theory?

The Franciscan monk and scientist Roger Bacon (1214-1294), who was long credited with the invention of gunpowder, put his finger on the problem long ago when he wrote:

Mathematics is the key
and gate of the sciences...
Neglect of mathematics
works injury to all knowledge,
since he who is ignorant of it
cannot know the other sciences
or the things of this world.
And what is worse,
men who are thus ignorant
are unable to perceive their own ignorance
and so do not seek a remedy.

In other words, if you don't know mathematics not only are you ignorant but, worse still, you are ignorant that you are ignorant. (Incidentally, the difference between ignorance and indifference is this: I don't know and I don't care!)

Mathematics has grown apace. Ninety per cent of all the mathematics we know has been discovered (or invented) in the last hundred

years. The mathematical sciences have been expanded to include computer science (both hardware and software). Mathematics has become the province of the specialist. The last of the generalists (those who knew all the mathematics of their time) was probably David Hilbert, who died in 1943. Certainly there has been no one since then.

The reason for specialization is very clear. A young man who seeks a doctor's degree must expand the frontiers of mathematical knowledge, and do so in a specific area. The generalists are weeded out. Armed with his degree, he must continue in research--unless he veers off into administration.

Albert Einstein admitted in his 'scientific obituary' that he had considered mathematics as a profession in his youth but as he surveyed the many specialized fields he realized he would have to spend a lifetime in each of them to make his mark. So he decided instead to become a physicist. (Albert Einstein, Creator and Rebel. B. Hoffman. Viking Press, New York 1972.) He never considered himself a mathematician and was embarrassed when he was portrayed as such in the public press.

Einstein, one of the brightest minds of our age, realized that he could never achieve a unified field theory of mathematics and walked away from the problem. The problem, however, would not go away by itself. What is the conceptual structure of abstract mathematics? Einstein chose not to tackle it.

The problem has bothered me most of my adult life, and it has only been within the last eight years that I decided I had found a solution. I found solutions to other problems that were almost as challenging, and I never gave up.

The first one was the mathematics of esthetics. The primary problem in esthetics is to divide a line in the most pleasing proportion: the golden section of the classical Greeks. The golden section is the limit of the Fibonacci series. Slice three-dimensional Euclidean space from an origin of coordinates along the three Cartesian axes at distances of a Fibonacci series. The resulting parallelepipeds have six faces, and are all harmoniously related by the golden section and its multiplicities. You now have harmonious form. Now you add harmonious color by painting the three faces at one pole of the parallelepiped in the three primary colors and at the other pole in the secondaries. You have now combined harmonious form and color into an integrated whole. Mondrian can now be computerized.

The second challenge was to find a solution of the econometric problem. The answer came by starting from the equation of exchange: prices times production equals money times velocity of circulation (which mirrors the rate of interest). Then split goods production into consumer and producer goods, rank them by durability, calculate a long-term demand criterion for each based on population and living standards, and attach a new orders index to each. (Dynamic

Economics, Charles F. Roos, Principia Press, Bloomington, IN 1934.) Watch prices, the money supply, and its rate of change and velocity.

The third challenge was security selection: make a two-dimensional plot of the institutional stocks showing non-risk versus return, compute the 'efficiency' from the distance from the origin, and the 'aggressiveness' from the angle with one of the axes. These numbers become inputs to a 'suitability' criterion for individual investors. Then the portfolio management problem can be solved by making simultaneous hypothetical investments in the Dow-Jones or similar average.

The first breakthrough in the conceptual structure of abstract math came with the realization that an Euler diagram with three circles would make it possible to classify the topics of geometry, algebra and analysis (calculus) and their intersections or overlaps. Cantor laid the foundation for the theory of point set topology in 1874 with his book on transfinite numbers. The Euler diagram was discarded in favor of a Karnaugh map or Veitch diagram which made it possible to classify the four 'dimensions' of abstract mathematics and to provide pigeonholes for each of their intersections and to place them in approximate chronological order. (AMS Notices Jan 78.)

The time sequence of each mathematical discovery became an important part of the conceptual structure. Mathematicians, unfortunately, are not historians any more than medical doctors are interested in nutrition. The only decent history we have is that of Morris Kline which takes us into the 1920s. He stopped there because he refused to believe that the present rage for abstraction was meaningful, and even wrote a book to remonstrate against the 'loss of certainty.' Mathematics, however, makes no sense unless we have some sense of history, if only in the perspective sense: what happened in the past that brought us to where we are today. The Karnaugh map brought forth the importance of the need to place events in their historical perspective.

Now that the framework had been created, the superstructure had to be specified. What is mathematics? The answer, it turned out, is what mathematicians do: in other words, the subject classification index of Mathematical Reviews. A taxonomy of all the topics (separated into applied math and abstract math) seemed to be a lifetime task for the experts. But there was a breakthrough: how about identifying the topics by their vocabulary? There is a language and vocabulary of geometry, of algebra, of analysis (the calculus), and of the topology of point sets. List all the words in the American Mathematical Society subject classification index, then separate them into four groupings, then assign codes to each topic depending on their vocabulary content (1111 for topics with content of geometry, algebra, analysis and topology; 1000 for topology only; and so on).

Classification of the topics is clearly a job for a computer, and I hope to be able to go back and tackle the job again from scratch with some better computer algorithms (AMS Notices Oct 78).

Once an orderly structure had been imposed, if you will, on the topics of abstract mathematics, another breakthrough occurred: the whole subject could be unified through the work of Saunders Mac Lane and Samuel Eilenberg which established in 1945 the theory of categories (which really ought to be called the theory of morphisms or theory of structures). This was a paradigm shift in mathematics comparable to the establishment of logic by Zeno in 600 B.C., of Euclidean geometry in 300 B.C., of algebra by Francois Viete in 1547, of the calculus of Newton and Leibniz in 1687 and the topology of point sets in 1874.

Category theory looked at the morphisms or transformations of mathematical objects instead of the mathematical objects themselves. There is a parallel in computer science, in that a computer application system can be studied from the viewpoint of the data and its movement through the system, or from the view of the transformations of the data. This new perspective made it possible to propose a new version of the foundations of mathematics based on the structure of the objects instead of the notions of set theory and inclusion.

They say that generality is the vice of the economist and the virtue of the mathematician. Generality and abstraction are powerful tools for unifying disparate phenomena, so these new theories have a beguiling fascination.

Now that we have a current and coherent framework for modern abstract mathematics, it becomes possible to establish a framework for applied mathematics, largely on the basis of these two questions: Does it need the calculus? Does it use the topology of point sets? (AMS Notices Oct 79.)

Before 1950 mathematics had two parts: abstract and applied. Since 1950 the mathematical sciences have four parts; computer hardware and computer software have been added and must be considered as part of the whole. Today a person with a problem goes to the applied mathematician, who turns to the computer hardware, which invokes computer software, which calls on an abstract mathematical algorithm which returns a result to the software which is passed to the hardware and then to the applied mathematician who produces the solution to the original problem.

What is the structure of the computer software quadrant of the mathematical sciences? There are four layers: the assembler layer (which talks to the hardware), the systems layer, the program development layer and the applications layer.

What is new here? Nothing, you would say. This is where I disagree. And this brings us to the point of this long story (my own scientific obituary): FORTH has changed the whole software picture by its ability to operate on all four levels of computer software.

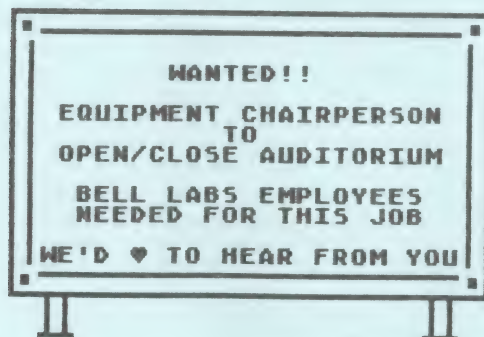
Furthermore, FORTH has in a sense made irrelevant the whole question of the architecture of computer hardware, and for one simple reason. FORTH is able to stick its own few hooks into the hardware and thereby convert the computer into a virtual FORTH machine.

The end result, in a few words, is just this: FORTH now provides a single uniform computer software and hardware interface for the mathematical scientists seeking to bridge the gap between applied mathematics and abstract mathematics.

What this means is that any man who chooses can now, in the words of Roger Bacon, "know the other sciences and the things of this world."

When I put my book together I propose to close it with this quote from Johannes Kepler:

What I predicted twenty-two years ago...
and believed in long before that...
what I revealed to my friends...
and sixteen years ago urged them to accept as valid...
that for which I joined Tycho Brahe,
for which I settled in Prague,
the problem which inspired my lifelong devotion to astronomy...
I have solved at last...
The book (containing it) may be read now or by posterity,
it does not matter.
If it must wait a century to be read,
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since God himself has had to wait six thousand years
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Video-taping Atari Computer Output

by Walt Morris - JACG

At the November meeting we were all treated to a program demo that had been prepared ahead of time on video tape so that the presenter didn't have to worry about playing the game while explaining it. It's easy to record your games, and fun too! (more on that later). There are two basic ways to record your computer's output.

The first way uses the "Computer/TV" switch which allows your TV to receive either the antenna signal or the Atari output. All you have to do to use this method is connect the "To TV" cable from the switchbox to the "VCR IN" of your video recorder leaving the antenna and Atari wires hooked up. To record TV, leave the switch in the "Antenna" position. When you want to record your Atari, flip the switch to "Computer" and set the VCR tuner to the same channel you set your TV to for the computer. You may find you need to adjust the fine tuning on the VCR for best picture. You can leave the switch wired in this way, as long as you remember to set the switch back to "Antenna" to watch or record TV again. This method has the advantage of simplicity to it, but doesn't give the best results.

The better way is to use a cable designed to plug into the "Monitor" jack on the computer (unfortunately the Atari 400 lacks such a jack, so if you have one you can't use this method without modifications). Simply connect a monitor cable to this jack, and then find the inputs on your VCR labelled "Video in" and "Audio in". Plug the corresponding leads from the monitor cable into these jacks and switch the VCR from "Tuner" to "Line" mode (some machines do this automatically, see your instruction manual for specific instructions). If the cables don't plug in directly you may need to get an adapter to match the kind of jack your VCR has to the kind of plug on the end of the monitor. The most common type of jack and plug is "RCA type", the same as most stereo equipment. This method will produce a better quality copy of what you are recording because no conversions are done on the output signal. It gets fed to the recorder directly without being converted to Channel 3 (or 2) by the Atari and back to separate video/audio by the tuner in the VCR. If you are already using the video/audio cables for a video monitor, you can put Y-connectors in them to send the signals to both places. Now everything is all set to record your games (or whatever).

Now that you've got the ability to record your computer's output, what can you do with it? The answer is limited only by your imagination. You can make test recordings on different kinds of tape to see which brand gives the best results on your machine. You can generate titles using a simple program which accepts input and displays it in graphics mode 1 or 2 (large character modes). You can set all the colors to black using BASIC immediate mode (type SE.1,0,0;SE.2,0,0;SE.4,0,0 followed by RETURN) and record black on the front of your tapes or in between selections. If your VCR has an "audio dub" feature, you can record a game and then dub play-by-play or other commentary onto the tape (let's go to the video tape!). You can play back games in slow motion, pausing to see why you got killed when you thought that Space Invader was nowhere near you (if your VCR has those "special effects").

Some final thoughts: 1) It doesn't matter what format VCR you have, these techniques will still work. 2) With hook-up method #1, you can't record a TV program and use the Atari simultaneously. 3) With hook-up method #2, if your VCR has automatic tuner/line switching, you will have to unplug the cables to record TV again. Have fun!

Writing For The JACG Newsletter

Articles should be submitted to the Editor by the 20th of the month for inclusion in the next issue. Submissions preferred on disk, using LJK Letter Perfect or Atari Writer. Font style should be Elite or Proportional with right hand justification. If hard copy is submitted the final printed width should be 4-1/4 inches from left margin to right margin. All formats will be considered including hand written documents if first arranged with the Editor.

We want to encourage everyone to voice his/her thoughts, knowledge, and opinions. Writing will be modified at the discretion of the Editor. No piece will be knowingly altered out of original intent.

SynFile+ Computed Dates

by Dennis John - JACG

SynFile+ is a very powerful program and, as in the case of most such programs, the documentation does not cover every aspect of it's use. SynFile+ allows you to choose from eleven types of data fields, one of which is the date field.

The date field will accept any date from April 1, 1900 to December 31, 1999 in the format mm/dd/yy. While it's nice to be able to include date information in certain types of record files, it would also be nice to be able to use those dates in computations. With a bit of finagling you can do just that.

First it's important to know how SynFile+ tracks date information. Each date you enter is stored by the program as a number. 01/01/00 is given the value 0. Each day adds one to this value so that 01/01/85 is stored as 30,987 and 01/01/86 or one year later, is stored as 31,352 which is 365 numbers higher.

The numbers SynFile+ uses to store date information are not normally shown but by adding a computed field to your database you can retrieve and use those numbers. As an example let's assume you have a date field which you have named "DATE HIRED". By adding a computed field named "DATE VALUE" with the formula DATE VALUE = DATE HIRED, your DATE VALUE field will always display the numeric value of the DATE HIRED field. You can use this value in all sorts of ways from tenure and raises to anniversaries and retirement. By using the value with other fields such as conditional, you can have the program print messages based on date calculations such as "RENEWAL DUE".

Here's just one example of how a computed data field could be a real work saver. You're running some sort of rental business (books, video, whatever) and tracking your inventory with SynFile+. If your database had date fields "DATE RENTED" and "CURRENT DATE" and computed fields with the numeric values of those dates, you could search for all items that have been out for a certain length of time or compute rental charges for those items. You could use SynFile's UPDATE ALL feature to enter the CURRENT DATE data for all the records in question with only a few keystrokes.

Many uses come to mind for databases of personnel records, memberships, inventory and so on... be creative!

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JACG MEMBERSHIP

The Jersey Atari Computer Group (JACG) invites you to become a member. Dues are \$20.00 per year and entitle the member to: 1) Receive the monthly newsletter; 2) Purchase programs from the group's extensive tape and disk libraries at special rates; 3) Join special interest groups or form new ones; 4) Benefit from the expertise and experience of other Atari computer users; 5) Participate in group purchases of software at substantially reduced prices; 6) Receive a membership card that entitles the member to discounts at local computer stores; 7) Attend monthly meetings to learn about the latest hardware and software, rumors, and techniques for getting the most out of your Atari computer; 8) Submit articles and programs to the newsletter and give demos and presentations at the monthly meetings; 9) Participate in sale/swap activities with other members; 10) Access the JACG nationally famous Bulletin Board; and 11) Have a lot of fun.

If all of this sounds good to you send a check or money order, payable to JACG, to:

Ron Kondos
201 Lake Valley Road
Morristown, NJ 07960

Remember, receiving the JACG newsletter is just one of the many benefits of being a member of JACG.

MIDI and the Atari Musician Part II

by James Miller - JACG

How would you like your Atari to have eight separately-articulated "voices", eight digitally-controlled oscillators, nine advanced 6-stage envelope generators, pitch bends, noise generator with separate envelope, and stereo chorus? Or maybe you're looking for drum sounds; realistic percussion and drum sounds. You may be able to get good results with some Atari music programs but using it for live performances on-stage or in a recording studio, it's just not enough.

Hybrid Arts to the rescue. MIDITRACK II developed for the Atari home computer is not a synthesizer or a drum unit but a MIDI controller system for use with any MIDI compatible Musical Instrument. It provides 16 track polyphonic recording, key velocity, after-touch, pitch/mod wheel functions, patch changes in addition to note-on note-off MIDI data and extensive synchronizing features that enable the computer to act as a master or slave to drum machine clocks. A MIDI clock can be generated or received and a clock input can be accepted through the joystick port. In record mode, a name for each track is displayed on screen. Up or Down arrow Keys control solo/mute indicators. Erase protection information is displayed as well as the number of beats from the start of song and if each track has been saved to disk or not, and memory left available. Track punch-in allows multi-passes over a track to correct for mistakes, or mid-stream sound changes. Many records with the exception of live music are loaded with punch-in's.

Hardware/software requirements are an Atari home computer w/ 64K, disk drive, the MIDIMATE interface box, the MIDITRACK II software, two MIDI cables and any MIDI compatible synthesizer or drum unit. The address for Hybrid Arts: PO Box 480-845, Los Angeles, CA. 90048



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FLEA MARKET RULES

In order to clarify the intention of the Executive Committee in sanctioning the use of the BTL lobby before and after monthly meetings for use as a member flea market we publish the following rules:

1. All flea market sellers must be current JACG members.
2. Space is provided on a first-come, first-served basis.
3. Only ORIGINAL programs with ORIGINAL documentation may be sold in the area of software.
4. Hardware of any type may be sold normally without constraint. The Executive Committee reserves the right, however, to limit the physical size and space consumed by such hardware.
5. Flea market business will be conducted only in the lobby and ONLY when the meeting is not in session in the auditorium.
6. The Executive Committee reserves the right to deny or suspend the privilege of flea market usage to any person, member or not, for infraction of these operating rules.

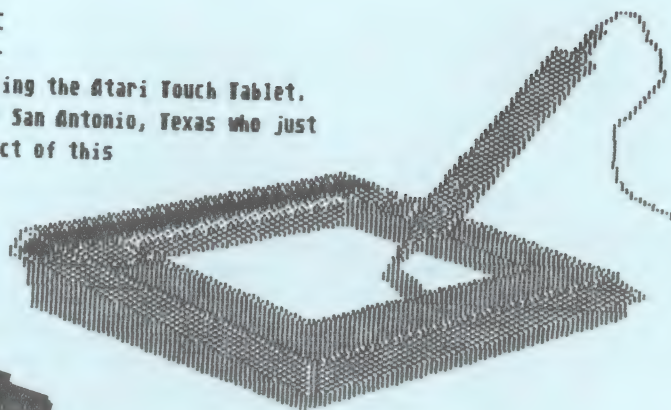


GIVE A BIT!!!

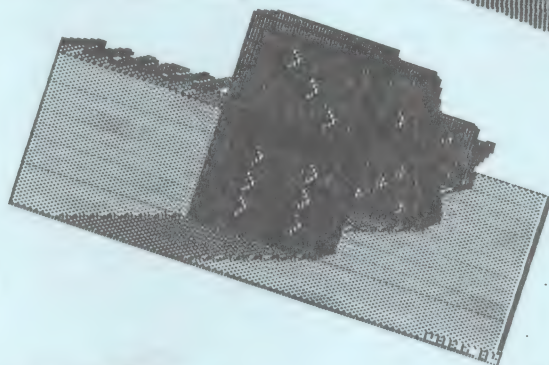
Contribute to the Newsletter this month.

The Graphics Tablet Part II

These terrific examples of computer art were produced using the Atari Touch Tablet. The very talented artist is 16 year old Mark Pedersen of San Antonio, Texas who just happens to be the nephew of Dick Kushner. The full impact of this work is only viewable on a quality color monitor but we thought you would be inspired to send us some of your work from any graphics source by seeing Mark's work. As space permits we will print more of the dozens of pictures he sent us. Thanks, Mark!



MARK '84



MARK '84

GO AHEAD
PUNK....

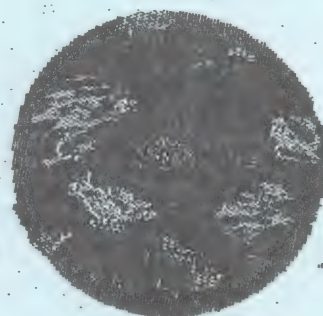


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JUST WHEN YOU
THOUGHT IT WAS
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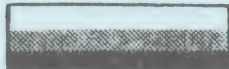
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HOW TO WRITE A COLUMN
FOR ANALOG MAGAZINE
by Donald Forbes - JACG

The magazine business has much in common with the entertainment business. The actor must be on time. He must know his lines. He must provide the audience with a meaningful emotional experience.

Timeliness is crucial in the theater. The actor must be on time for rehearsal. The curtain must open on time--"the show must go on."

It is not enough for the actor to know his lines. He cannot depart from the script, lest he distort the meaning the playwright intended to convey. He must recite his lines so as to give the correct cues to his fellow actors. And the playwright must not duplicate the cues: the actor will get confused--he will either skip to the second cue and leave out intervening material, or he will go back from the second cue to the first response and repeat a section of the play. The true patron of the theater is the little old lady (perhaps with hearing aid and thick glasses) in the back row who paid her money to see the show--everything must be loud enough for her to hear, and big enough for her to see.

Thirdly, it is up to the actor to provide a meaningful emotional experience. The play must be interesting, and usually a play is interesting because it portrays a conflict in the classic conflict formula: $M + G + O = C$ which translates as main character(s) + goal + opposition = conflict. The main characters must hold the sympathetic attention of the audience, and the opposition must be strong because "a play is as strong as its villain."

The elements of drama are the six C's: characters, conflict, complications, crisis, catastrophe, and conclusion. Characters portray the conflict. The conflict arises between opposing wills or forces (man against nature, man against man, man against society, man against himself, man against fate). Complications are the delays that create suspense and heighten interest. Crisis is the high point of the conflict. Catastrophe refers to the turn of events which resolves the crisis. Conclusion is the reasonable outcome of the catastrophe. (Chapter 3 of 'How to Write a Play' in 240 pages by Raymond Hull.)

The same rules apply if you want to write a column for Analog Magazine.

Your copy must arrive on time. Be sure to get your copy to Jon Bell, the managing editor, by the twentieth of the month. There is a lag of about six weeks before the copy that arrives on the editor's desk ends up on the newstand--editing, printing, delivery. Put yourself in the editor's shoes and get your copy in on time. Enclose a 13 cent postcard addressed to yourself with a note: Please drop in outgoing mailbox. When it comes back you know that they received your masterpiece; if it doesn't come back in a week pick up the phone to make sure it arrived and be prepared to mail a duplicate.

Our editor Frank Pazel faces the same situation each month. He has about a week

from the 20th to the 25th to put the JACG newsletter together. If his hardware were to fail, he would be in a bind. So, get your copy in early.

Requirement number two is Clean Copy. This does not mean clean paper. Nobody wants paper nowadays. The typewriter is dead: the wordprocessor is in. Typed copy means that everything has to be retyped for editing and typesetting. Submit all your copy on disk, and be sure that you have a backup so that you can provide a duplicate if necessary. But send along a printed copy as a courtesy, so they can tell what is on the disk. The editors can then load your copy into the wordprocessor, add headings and subheadings, allow for page breaks, insert italics, make stylistic changes and cut your copy if it runs too long. Nobody wants paper nowadays. You should know that: Art Leyenberger and Frank Pazel have been saying it for two years.

Clean copy also means proper spelling. This does not mean checking doubtful words in the dictionary. Everything must be checked. You must be tired of reading technical papers that refer to a kernal or incompatable hardware or an office calander or some principle feature or a capitol offense. Here at hand is a new local library book on 'Computer Programs for the Kitchen' which beginning on page six insists on referring to the inventor of the precursor of punched cards Joseph Marie Jacquard as Jacquard and even retains the misspelling in the index. Does the author know computers? Or French? Or even cooking?

Clean copy, furthermore, means getting your facts straight. Never quote from memory. Go to the library and look up the quotation. You rarely get feedback from your readers. It is only when you make a mistake that they delight in pouncing on you, and making you and the editor look foolish.

Clean copy means also that what you give your editors is your own work, not a rehash of what someone else did before you. This does not mean you cannot use someone else's work. Everything that can be photographed has already been photographed by someone. Every word in the dictionary has already been defined by an earlier lexicographer. Every novel, every play, every movie and every TV show owes something to its predecessors. As you know, there is nothing new on television--the same material is used day after day in a new setting to make it seem fresh and appealing.

Editors are concerned about the copyright laws, which were designed to reward an author for his labors but were never designed to prevent the spread of information. You cannot copyright an idea, but only the expression of the idea. For years you could publish "The Adventures of Tom Sawyer" if you attributed it to Samuel Langhorne Clemens but not to Mark Twain, because the heirs owned the right to the name. The copyright owner has to be able to show that he suffered damage. The doctrine of 'fair use' means that the right to make copies is not absolute. Go to the library, read the copyright law, and just make sure that you do not embarrass your editors.

The one sure way to trap errors of spelling and fact is to print your copy, and with a red (fact) pen and a green (spelling) pen underline every single word after you are sure of the spelling and you can substantiate the facts with a document, a reference book, a witness or personal knowledge. The newsmagazines operate this way, and you find few errors (unless it is TIME magazine trying to say something in Spanish).

The main reason for all this preamble is that you are trying to establish your credibility with your editors. This is your principal asset, and you don't want to jeopardize it. And for one very good reason. Once the editors trust you, they leave you alone--no nitpicking, no fussy editing, no chopping your text because they say they need the space. Which means that you can get away with the corny jokes, your brilliant turns of phrase, your personal reminiscences. But be careful. Most of the text you read is written in the third person--and for a good reason.

What do I write about?

The answer to that one is easy: If it is interesting to you, the chances are that it will be of interest to someone else.

Why did you buy Analog Magazine in the first place? It must have held something of interest. Were you interested in the games? Were you interested in the Atari hardware? The graphics hardware? The capability of running arcade-type games on a home computer? The sound hardware? The ability to imitate Bach four-part canons and fugues? Or the late Beethoven quartets? Or the design of the operating system? Or the implementation of interpreted BASIC? The 6502 chip, which also was used in the Apple and other computers? The 6502 assembler? The use of the Atari as an intelligent terminal? Networking? Bulletin boards? Recreational mathematics? Artificial intelligence? The theory of game design? The Atari as a graphics animation machine? Business applications? Accounting packages? Spreadsheets? Relational data bases? Simulation packages? Operations research? Astronomy? Astrology? Weather forecasting? Cryptography? Code cracking? Teaching small children? The theory and design of word processors? Industrial design? Computer aided design? New languages, such as LOGO and LISP, PILOT and Pascal?

Almost any one of these topics could be developed by a skilled practitioner into a monthly column that could hold the interest of a wide audience.

The way to get started is to write your first article and, we hope, get it published in the JACG newsletter. It is worth remembering the comment of the Marquise du Deffand (1697-1780) in a letter of 7 July 1763 to the mathematician Jean d'Alembert on the legend that St. Denis walked six miles, carrying his head in his hand: 'The distance doesn't matter; it is only the first step that is difficult.'

The science editor at Newsweek used to say that there were three steps in writing a story: (1) get the facts, (2) explain them in layman's language and (3) put them

together in an interesting story. Get in the habit of collecting material for potential stories. When I don't know where to start, I take a blank sheet of paper and write down all the topics I can think of that might make a story. Then I puzzle over the sheet looking for some central fact or theme that might serve as a skeleton for the rest of the items. Or I study the sheet to see whether the topics can be arranged in some kind of logical grouping. This is where it all starts.

If this seems like stupid advice, I assure you that it is not. The one most valuable asset of a writer is his unconscious, subconscious or nonwaking mind, and you can make it work for you once you get the knack. You can't force it--you just have to be ready to catch the inspiration when it comes.

Here again is how author Raymond Hull spells out the process in another book on 'How to Write HOW-TO Books and Articles':

1. Consciously study the problem, whatever it may be, that you need to solve. Specify clearly what new idea or combination of ideas you need. The best way is to set the problem down in writing. For example: 'What is the clearest way to explain so-and-so?'

2. Leave that question or problem in your subconscious; forget it for a while. Turn your attention away to some other piece of work, or to some noncreative activity, some nonwork subject.

3. You cannot tell when the answer, the creative idea, will come--it may be in a few minutes, it may be in hours or days. But whenever it does come, catch the idea and write it down.

As Hull says, when the idea comes rush to your Atariwriter and put the idea on paper. Get everything down while it is still in your mind.

When you put your story together, put the main idea in the first sentence. Did you know that newspaper stories are a series of inverted triangles hanging from each other? The first tells WHO did WHAT to WHOM, WHEN and WHERE, HOW and WHY, for HOW MUCH? The second triangle elaborates one of these themes, and so on. Furthermore, the structure is such that you can chop off paragraphs one by one from the end, and still have a coherent story.

Be sure that you start every paragraph with a topic sentence: which tells the reader what the upcoming paragraph is all about. Finally, beware of the revision trap. Try to structure the story in your mind in final form. Print your output and read it a dozen times but, I repeat, beware of the revision trap. If the structure is not perfect, don't worry; just try to do better the next time around.

Read your story aloud. Better still, read it aloud to someone who will listen. Read aloud a page at random from TIME magazine. Read your story aloud again. Does it sound like you?

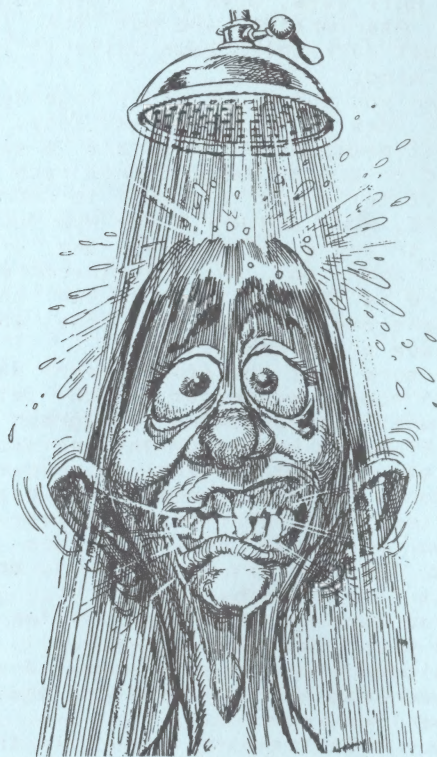
Your best training ground is the JACG newsletter, and the training is free. You will find articles there that illustrate all the points I have raised. I found a topic of

interest and as I learned more about it, wrote articles in the newsletter about my limited experiences hoping that by sharing my knowledge I could gain allies who would provide me with feedback and a broader knowledge base. I handed out copies of articles and talked to everyone who would listen. I wrote about anything that came to mind and turned it over to Art Leyenberger, who printed it. To me it seemed like a crying shame to let all that glorious white space go to waste when I could fill it up with anything I wanted to say.

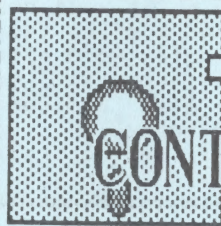
One day Art said that Analog wanted someone to write a column on my specialty. I was scared. I was not really an authority. The critics would tear me to pieces. Then I had an inspiration. I would write a tutorial for beginners. The reader would conduct his own show-and-tell demo. I could be as ignorant as my readers and it wouldn't show. All I would need would be lots of executable code, so that the readers could go to their keyboard and type in my text.

The ploy worked. Today I finished column number 7 (seven months of blood and toil and sweat and tears--and \$200 to \$250 a month, which pays for more books than I can find time to read) and am working on column number eight, in which my readers will find themselves promoted to professors to teach a course to beginners.

So now you know how write a monthly column for Analog Magazine. Of course, I don't expect that you ever will, or I wouldn't be writing this article. Do you think I would be stupid enough to tell you all my secrets if I thought for one minute that you would take my job away from me?



A COLD SHOWER IS THE ONLY CURE FOR ATARI FEVER!

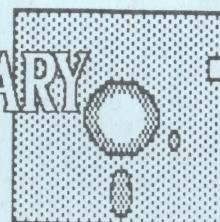


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You can get free disks from our nationally famous and immensely growing JACG Disk Library by simply convincing any retailer, vendor, manufacturer, or whomever, to place an ad in the JACG Newsletter. For every quarter page ad you recruit from someone who has either never advertised in the Newsletter or has not advertised in the last 12 months you will get your choice of one free library disk. Half page ads bring you two disks and full page ads bring you four disks. How can you beat that deal?

Advertising rates are \$15/quarter page, \$25/half page, and \$40/full page. Your customer's ad reaches a targeted audience of enthusiastic Atari users of over 500 plus computer store and courtesy mailings bringing the total up to well over 700 per issue. Placement of ads in the Newsletter is the exclusive decision of the Editor but every consideration will be given advertiser requests. Space is available on a first-come, first-served, space-available basis. Contact Advertising Manager Herb Lehner at (201) 725-9394 for further information or any JACG officer listed on the back page of the Newsletter.

Get out there, talk up the efficacy of advertising in the official JACG publication, drum up some business which will bring down the cost of printing, and earn yourself some free disks. This offer is limited to current JACG members and each new advertiser, regardless of repeat business with larger or smaller ads, can be used only once. Members of the Commodore, Apple, and IBM-PC Boards of Directors must apply for special dispensation to qualify for this offer.

Rules For Merchant Sales at JACG Meetings

Commercial Sellers Must Advertise

The JACG Executive Committee has adopted the following policy concerning commercial sales at any JACG official meeting. The effective date of implementation will be with the July 14th, 1984 meeting.

1. Any merchant selling or renting products, selling services, or in any way promoting same at JACG club meetings must have an advertisement in the current or previous month's issue of the JACG Newsletter, 1/4 page minimum.

2. The number of merchants shall be restricted to three per meeting unless special permission is granted by the President. Preference will be given to current advertisers.

3. Each merchant will occupy no more than one table space or its equivalent. The JACG does not guarantee availability of tables.

4. Merchants are responsible for the return of all furniture they use to its original location and to leave their area neat and clean before leaving.

5. Merchants will check with the Advertising Manager for permission to set up prior to the meeting to have their qualification confirmed.

6. Merchants may not sell during the official meeting and must cease sales and clean up within 15 minutes after the end of the official meeting.

7. Any merchant violating these rules will be not allowed to operate at JACG functions until compliance is assured through the JACG Executive Committee.

8. A merchant is any person, or group of persons, who operate as a regular full or part-time business for the purpose of profit.

The purpose of these operating rules is to insure non-violation of the Bell Laboratories use agreement which, if violated, could jeopardize JACG's use of the facilities. We appreciate your full cooperation in this matter. These rules do not apply to regular members selling their own second hand hardware or original software as outlined in the Flea Market Rules.

HAVE YOU RENEWED YOUR MEMBERSHIP?

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The above listings are free to current advertisers. Others interested in being listed in this column should send business address and telephone number with check for \$5 per month, payable to JACG, to advertising manager Joseph Rowland, 429 Washington Street, Hackettstown, NJ 07840.

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January 1985

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